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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,504	05/05/2006	Tae Ri Lee	ACE-31431	9438
10361	7590	04/29/2008	EXAMINER	
Antony C. Edwards			FAN, HONGMIN	
P.O. Box 26020			ART UNIT	
Westbank, BC V4T 2G3			PAPER NUMBER	
CANADA			2612	
			MAIL DATE	DELIVERY MODE
			04/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,504

Applicant(s)

LEE ET AL.

Examiner

HONGMIN FAN

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 3/14/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawing 4 is objected to because it needs legends to describe claimed components. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 12-13, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6034596) in view of Sheriff (US 4751514).

As to claim 1-7, referring to Fig. 1-4, Smith et al disclosed a motor vehicle tire pressure and temperature sensing system comprising a temperature sensor and a pressure sensor (i.e. near field device) which feed signals to a microcontroller, and the resultant output signals are fed to a transmitter/receiver which transmits signals to a display unit located within the vehicle's passenger compartment (col. 1, line 47-52).

Smith et al further disclosed an antenna. Smith et al did not disclose a machine body antenna. However, it is known in the art to use a machine body as antenna so that no addition antenna would be needed. Referring to Fig.1, Sheriff teaches a multi-frequency vehicular antenna system wherein the vehicle body is used as antenna. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the vehicle body as antenna in Smith's system so that no additional antenna would be needed.

As to claim 8, referring to Fig. 1, Smith et al disclosed that the sensor unit 10 screws onto a tire valve stem 11 (col. 2, line 41-42).

As to claim 9, referring to Fig. 1, Smith et al disclosed that the unit 10 further includes an outer casing 14 having a threaded recess 16 at its lower end 15 to engage the threaded valve stem 11. The recess 16 is in line with the bushing aperture 13 with the bushing 12 coupled to the lower end 15 of the casing 14 (col. 2, line 45-47).

As to claim 12, referring to Fig. 3, Smith et al disclosed a processor 32 for control information exchanging between the transmitter and receiver set

As to claim 13, referring to Fig. 3-4, Smith et al disclosed the transmitter 34 and receiver 63 both are transceivers.

As to claim 18, referring to Fig. 3, Smith et al disclosed a processor 63 and a display 58 for displaying processed information.

As to claim 19, the claim is interpreted and rejected as claim 1.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al in view of Sheriff, further in view of Rea et al (US 6300867).

As to claim 10, Smith et al did not disclose a cupped upper end shaped to fit the base of a valve stem. However, it is known in the art to have a cupped upper end shaped in order to fit the base of a valve stem. Referring to Fig. 3A, Rea et al teach a tire pressure warning device wherein the housing 12 has a cupped upper end 52 shaped in order to fit the base of valve stem 62. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to have a cupped upper end shaped to fit the base of a valve stem in Smith's system so that the housing would not expose to harsh outside environments, such as dust or moisture.

As to claim 11, Rea et al teach an aperture 32.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al in view of Sheriff, further in view of Hui (US 6868718).

As to claim 14-17, Smith et al did not disclose the receiver is powered by the vehicle's cigarette lighter plug-in port. However, it is well known in the art to power such a receiver. Referring to Fig. 3, Hui et al teach a wireless tire pressure alarming system as directly powered from car cigarette-lighter receptacle. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use the vehicle's cigarette lighter port as power source in Smith's system so that it would not need additional power supply.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hongmin Fan whose telephone number is 571-272-2784. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HF

/Jeff Hofsass/

Supervisory Patent Examiner, Art Unit 2612